

# Foreign Agricultural Service *GAIN* Report

Global Agriculture Information Network

Required Report - public distribution

Date: 1/8/2003 GAIN Report #TW3002

# **Taiwan**

# **Oilseeds and Products**

Annual

2003

Approved by:

Jonathan P. Gressel American Institute in Taiwan

Prepared by: Chiou Mey Perng

## **Report Highlights:**

Post forecasts soybean import demand to hold at 2.2 million tons in 2003 as increased soymeal inclusion rates in feed tend to counteract contractions in the livestock and poultry industries. Taiwan's poultry industry is facing increased competition from imported chicken meat while poultry and pork demand is declining with the current poor economic climate. Increased use of full fat soymeal means fewer beans are being crushed, thereby increasing the demand for soy oil imports. Other than sunflower oil imports, which saw a 20% increase, imports of other higher priced oils declined in 2002 as consumers switched to cheaper soy oil.

## Oilseeds and Products Table of Contents

SECTION I. SITUATION AND OUTLOOK	<u>1</u>
Oilseeds Situation and Outlook	<u>1</u>
Oilmeal Situation and Outlook	
Oil Situation and Outlook	
SECTION II. STATISTICAL TABLES	<u>4</u>
Table 1. Total Soybean Production, Supply and Distribution	<u>4</u>
Table 2. Total Soybean Meal Production, Supply and Distribution	<u>5</u>
Table 3. Total Soybean Oil Production, Supply and Distribution	
	<u>6</u>
Table 4. Soybean Import Matrix for 2001/02	<u>7</u>
Table 5. Soybean Meal Import Matrix for 2001/02	<u>7</u>
Table 6. Soybean Oil Import Matrix for 2001/02	
	<u>8</u>
Table 7. Soybean Meal Price at Crushers	<u>9</u>
Table 8. Fill Rates for 2002 Meat and Poultry Quotas	<u>9</u>
Table 9. Pork Imports vs Domestic Production and Market	<u>10</u>
Table 10. Tariff Rates for Edible Oils and Oil Seeds	
	<u>10</u>
Table 11. Imports of New-to-Market Oils	<u>11</u>
FEED DEMAND	
STRATEGIC INDICATOR TABLES FOR [TAIWAN]	
	12

GAIN Report #TW3002 Page 1 of 14

### SECTION I. SITUATION AND OUTLOOK

#### **Oilseeds Situation and Outlook**

In 2001/2, Taiwan's swine and poultry industries were negatively impacted by an economic slowdown which reduced meat demand and Taiwan's WTO accession which brought increased access for chicken meat imports. GDP grew at a 3.3% rate in 2002 and much the same performance is expected in 2003. Taiwan normally experiences growth in the 6-7% range. However, increases in the feed inclusion rate of soybean meal have tended to counteract this negative trend and as a result Post forecasts soybean imports in 2002/3 and 2003/4 will remain at 2.2 million metric tons.

Taiwan soybean imports in 2001/02 increased 11 percent from a year earlier due mainly to an increase in the feed inclusion rate of soybean meal and higher carry over stocks. Livestock producers are willing to pay market premiums for feeds with newly-introduced full fat soy meal and dehulled soy meal, which encouraged increased production and market promotions of full fat soy meal and dehulled soy meal. Full fat soy meal is priced at NT\$9.70/kg and dehulled NT\$8.60/kg, compared to domestically crushed conventional soy meal (with hull) at NT\$8.00/kg, as quoted on December 30, 2002 (The current exchange rate is US\$ 1.00 = NT\$34.85). The feed inclusion rate of soy meal is forecast to remain high.

The United States had an 89 percent share of the total 2001/02 imports, a 4 percent increase from a year earlier, and is anticipated to retain its leading position to Taiwan soybean imports in the coming years. The local livestock and feed industry are adjusting to Taiwan's post-WTO market situation to compete with increasing meat and poultry imports. U.S. soybeans face keener market challenges from cheaper beans from Brazil and other supplying countries. There are also potential challenges from small amounts of PRC beans for food use. Taiwan currently bans PRC soybean imports. However, Taiwan's import control on PRC agricultural products is anticipated to gradually relax.

Soybeans for food use, mainly in the form of tofu and soy milk, is 255 TMT based largely on estimated sales by crushers of sorted US#2 beans to end-users. In 2001/02, of the 255 TMT food beans, approximately 6.5 TMT is identity-preserved (IP) beans, non-GM food grade beans, and organic beans. The US supplies about 3.5 TMT, Canada 2 TMT, and Australia 1 TMT. Taiwan's non-GM food bean consumption grew 1.5 TMT after the voluntary non-GM food labeling regulation took affect in January 2001. There are more soy food products labeled non-GM, conventional, or organic available on the market. As of January 1, 2003, only bioengineered soy and corn varieties which have been registered with DOH are eligible for commercialization. The mandatory bioengineered food labeling takes effect on January 1, 2003 for packaged raw soybeans and corn, soybean meal/flour, corn grit/meal/flour. The effective date for primarily processed packaged soybean and corn food products, such as tofu, dried tofu, soy milk, soy curd, frozen corn, canned corn, soy protein, is January 1, 2004. The effective date for processed packaged soybean and corn food products is January 1, 2005.

Post anticipates that the local soy food processing industry will increase pressure on Taiwan authorities to lift the import ban on PRC soybeans in 2004 due to the mandatory bioengineered food labeling on packaged tofu and soy milk. According to Taiwan's labeling regulation, soybean or corn food products which are not packaged are not subject to the GM food labeling requirement, which includes the large volume of products sold in wet markets and restaurants. Therefore, Taiwan's potential demand for non-GM soybeans is only about 50 TMT, or about 20 percent of the food-use-market which is in packaged products.

GAIN Report #TW3002 Page 2 of 14

#### **Oilmeal Situation and Outlook**

Taiwan's soybean meal demand is virtually all met with domestically crushed meal from imported soybeans. Soybean meal imports represent only 2 percent of total consumption. Taiwan's demand for soybean meal will decrease in line with the anticipated decline in feed demand driven by post-WTO production adjustments in the swine and poultry sectors. As noted above, this decline will be slowed by increased soy meal inclusion rates in feed rations. According to Taiwan's Council of Agriculture (COA), the WTO accession impact on feed demand will be significant. By 2005, COA expects a decrease of one million head in the standing pig population from the pre-WTO accession level of 7.1 million head. The current standing population is 6.8 million head based on the November 2002 hog consensus and shows a drop of 5 percent from November 2001. TRQ imports of chicken meat and poultry variety meats lead COA to forecast a decrease of 20 to 30 percent in the broiler sector by 2005. COA's preliminary 2002 production numbers for hog and poultry indicate an 11 percent decrease in the poultry sector and a 5 percent decrease in the swine sector. COA adjusted the 2003 poultry and swine production targets down by 5 percent from the 2002 level. According to Taiwan's TRQ administration organization, the Central Trust of China (CTC), the chicken meat quota fill rate is about 100 percent in 2002. Post anticipates that chicken meat quotas will continue to have near one-hundred percent fill rates. TRO volume will expand to 32,577 mt in 2003 and to 45,990 mt in 2004 from the current level of 19,613 mt after which imports will be liberalized. However, Post forecasts that the actual impact of WTO market access will be less significant than that predicted by COA. Taiwan's hog sector is normally competitive with imports. Pork imports are driven more by the local hog market and total meat consumption levels than the TRQs on pork belly and variety meats as imports of other cuts are already liberalized years ago (see Table 8 & 9).

According to preliminary industry estimates, there was a 4 percent decrease in feed production in 2002. However, soy meal consumption decreased only 2 percent due primarily to an increase in the feed inclusion rate of soybean meal. Full fat meal and dehulled meal are increasingly popular. Approximately 220 TMT of full fat meal and 360 TMT of dehulled meal were produced in 2001/02, up about 25 percent from the previous year. In 2002, the feed inclusion rate of fish meal was 3.2 percent and other oilseed meals combined was 2.2 percent, down from 3.8 percent and 2.4 percent the previous year, respectively. Soybean meal accounts for around 22.8 percent of feed rations, up by 0.6 percent from the previous year. Local feed mills have also started introducing fermented full fat meal as a substitute for dairy products in feed rations. The American Soybean Association (ASA) Taiwan office is working effectively to increase in the inclusion rate of soybean meal in feed rations. Despite the trend of declining hog and poultry production, soybean meal demand forecasts remain at relatively high levels.

PSD Note: The meal extraction rate is relatively high as soy meal production includes 220 TMT of full fat soy meal in 2001/2, 240 TMT in 2002/3 and 260 TMT in 2003/4.

#### Oil Situation and Outlook

In 2001/02, Taiwan total vegetable oil consumption is estimated at 544 TMT, of which soybean oil accounts for 70 percent, up 4 percent from the previous year and a rebound to the level of two years ago. This is due to increases in domestically crushed and imported soy oil supply and decreases in new-to-market oil imports. There are three segments in the Taiwan vegetable oil market: 1) market leaders: soybean oil and palm oil with a market share of 70% and 15%, respectively; 2) new-to-market: olive, canola, corn, sunflower, and safflower oils with a combined 11% share; and 3) traditional Chinese: peanut and sesame oil with a combined 3% share.

GAIN Report #TW3002 Page 3 of 14

Despite tariff reductions for new-to-market oils in 2002 with Taiwan's WTO accession, new-to-market oils account for a declining share of the total edible vegetable oil market due partially to the poor economic climate which affects demand for these higher priced oils..

There is already a relatively high level of oils and fats consumption at 23.27 kg per capita in 2001. Due to the poor economic climate, total vegetable oil consumption for the coming two years is forecast at the current level of around 550TMT. Despite increasing import potential for new-to-market oils due to the post-WTO tariff reductions (see Table 11), soybean oil and palm oil are expected to retain their leading market position as they are primarily used in the HRI and processing sector. However, anticipated reduced local crush will increase import demand for soy oil and new-to-market oils, in particular canola oil and sunflower oil which compete with soy oil in household use. The tariff rates on soybean oil, sunflower oil, safflower oil, and corn oil are fixed at 5%, but olive oil will be gradually reduced to zero percent and canola oil to 4 percent in 2007. This will increase market competition for imported U.S. sunflower oil and domestic crushed soy oil. National Sunflower Association efforts to promote NuSun oil have been so successful in the health conscious Taiwan market, that demand from imports outstrips available supply.

PSD Note: The oil extraction rate is adjusted to the relatively low level of around 0.16 due to full fat soy meal production.

GAIN Report #TW3002 Page 4 of 14

# SECTION II. STATISTICAL TABLES

Table 1. Total Soybean Production, Supply and Distribution

PSD Table						
Country	Taiwan					
Commodity	Oilseed, Soy	Oilseed, Soybean			(1000 HA)(1	000 MT)
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		10/2001		10/2002		10/2003
Area Planted	3	0	0	0	0	0
Area Harvested	3	0	3	0	0	0
Beginning Stocks	84	84	84	220	84	165
Production	6	0	6	0	0	0
MY Imports	2400	2578	2400	2200	0	2200
MY Imp. from U.S.	1930	2301	1878	1923	0	1900
MY Imp. from the EC	0	0	0	0	0	0
TOTAL SUPPLY	2490	2662	2490	2420	84	2365
MY Exports	0	0	0	0	0	0
MY Exp. to the EC	0	0	0	0	0	0
Crush Dom. Consumption	2145	2187	2130	2000	0	1945
Food Use Dom. Consump.	261	255	276	255	0	255
Feed,Seed,Waste Dm.Cn.	0	0	0	0	0	0
TOTAL Dom. Consumption	2406	2442	2406	2255	0	2200
Ending Stocks	84	220	84	165	0	165
TOTAL DISTRIBUTION	2490	2662	2490	2420	0	2365
Calendar Year Imports	0	2442	0	2500	0	2200
Calendar Yr Imp. U.S.	0	2096	0	2100	0	1900
Calendar Year Exports	0	0	0	0	0	0
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

GAIN Report #TW3002 Page 5 of 14

Table 2. Total Soybean Meal Production, Supply and Distribution

PSD Table						
Country	Taiwan					
Commodity	Meal, Soybe	an			(1000 MT)(PERCI	ENT)
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		10/2001		10/2002		10/2003
Crush	2145	2187	2130	2000	0	1945
Extr. Rate, 999.9999	0.715618	0.786465	0.715962	0.78	ERR	0.77635
Beginning Stocks	25	25	29	81	29	81
Production	1535	1720	1525	1560	0	1510
MY Imports	50	26	75	20	0	20
MY Imp. from U.S.	17	16	16	12	0	12
MY Imp. from the EC	0	0	0	0	0	0
TOTAL SUPPLY	1610	1771	1629	1661	29	1611
MY Exports	0	0	0	0	0	0
MY Exp. to the EC	0	0	0	0	0	0
Industrial Dom. Consum	0	0	0	0	0	0
Food Use Dom. Consump.	0	0	0	0	0	0
Feed Waste Dom. Consum	1581	1690	1600	1580	0	1530
TOTAL Dom. Consumption	1581	1690	1600	1580	0	1530
Ending Stocks	29	81	29	81	0	81
TOTAL DISTRIBUTION	1610	1771	1629	1661	0	1611
Calendar Year Imports	0	46	0	17	0	20
Calendar Yr Imp. U.S.	0	25	0	9	0	12
Calendar Year Exports	0	0	0	0	0	0
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

GAIN Report #TW3002 Page 6 of 14

Table 3. Total Soybean Oil Production, Supply and Distribution

PSD Table						
Country	Taiwan					
Commodity	Oil, Soybear	l			(1000 MT)(PERCI	ENT)
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		10/2001		10/2002		10/2003
Crush	2145	2187	2130	2000	0	1945
Extr. Rate, 999.9999	0.16317	0.162323	0.164319	0.1605	ERR	0.161954
Beginning Stocks	105	105	89	98	80	67
Production	350	355	350	321	0	315
MY Imports	50	36	75	50	0	60
MY Imp. from U.S.	5	10	5	15	0	20
MY Imp. from the EC	0	0	0	0	0	0
TOTAL SUPPLY	505	496	514	469	80	442
MY Exports	2	1	2	2	0	0
MY Exp. to the EC	0	0	0	0	0	0
Industrial Dom. Consum	15	15	15	15	0	15
Food Use Dom. Consump.	399	382	417	385	0	385
Feed Waste Dom. Consum	0	0	0	0	0	0
TOTAL Dom. Consumption	414	397	432	400	0	400
Ending Stocks	89	98	80	67	0	42
TOTAL DISTRIBUTION	505	496	514	469	0	442
Calendar Year Imports	0	18	0	32	0	50
Calendar Yr Imp. U.S.	0	7	0	12	0	15
Calendar Year Exports	0	0	0	0	0	0
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

GAIN Report #TW3002 Page 7 of 14

**Table 4. Soybean Import Matrix for 2001/02** 

Import Trade Matr	ix		
Country	Taiwan		
Commodity	Oilseed, Soyb	ean	
Time period	10/2001	Units:	1,000 mt
Imports for:	2001		2002
U.S.	2301	U.S.	1923
Others		Others	
Brazil	273	Brazil	273
Australia	2	Australia	2
Canada	1	Canada	1
Total for Others	276		276
Others not Listed	1		1
Grand Total	2578		2200

Table 5. Soybean Meal Import Matrix for 2001/02

Import Trade Matr	ΙX		
Country	Taiwan		
Commodity	Meal, Soybea	n	
Time period	10/2001	Units:	1,000 mt
Imports for:	2001		2002
U.S.	16	U.S.	12
Others		Others	
India	10	India	8
Total for Others	10		8
Others not Listed			
Grand Total	26		20

GAIN Report #TW3002 Page 8 of 14

Table 6. Soybean Oil Import Matrix for 2001/02

Import Trade Matr	x		
Country	Taiwan		
Commodity	Oil, Soybean		
Time period	10/2001	Units:	1,000 mt
Imports for:	2001		2002
U.S.	10	U.S.	15
Others		Others	
Argentina	13	Argentina	20
Brazil	5	Brazil	10
Paraguay	5	Paraguay	5
Malaysia	2		
Philippines	1		
Total for Others	26		35
Others not Listed			
Grand Total	36		50

GAIN Report #TW3002 Page 9 of 14

**Table 7. Soybean Meal Price at Crushers** 

Prices Table			
Country	Taiwan		
Commodity	Meal, Soybea	n	
Prices in	NT\$	per uom	100 kg
Year	2001	2002	% Change
Jan	870	830	-4.60%
Feb	881	816	-7.38%
Mar	873	795	-8.93%
Apr	860	784	-8.84%
May	848	781	-7.90%
Jun	847	779	-8.03%
Jul	857	793	-7.47%
Aug	861	809	-6.04%
Sep	860	815	-5.23%
Oct	860	824	-4.19%
Nov	847	814	-3.90%
Dec	841		-100.00%
Exchange Rate	34.85	Local currency \$	y/US

Table 8. Fill Rates for 2002 Meat and Poultry Quotas

	Chicken Meat	Poultry Offal	Pork Belly	Pork Offal
Quota (mt)	19,163	1,836	6,160	10,000
Imports (mt)	19,152	883	4,294	9,683
Quota Filled Rate	100%	50%	70%	100%

Source: Central Trust of China & Board of Foreign Trade dated 12/29/2002

GAIN Report #TW3002 Page 10 of 14

Table 9. Pork Imports vs Domestic Production and Market

Year	Pork Import	s in 1,000 mt	Domestic Pork Productionin	Auction Price in	
	Meat	Offall	1,000 mt	NT\$/100kg-head	
1999	69	13	822	6,246	
2000	45	9	921	4,714	
2001	16	5	962	4,013	
2002*	25	10	909	4,385	

Source: Council of Agriculture (COA) and National Animal Industry Fundation (NAIF).

Note: 2002 figures are estimates based on 2002 first ten months figures.

Table 10. Tariff Rates for Edible Oils and Oil Seeds

HS Code	Seed/Oil	Tariff before WTO accession	Current Tariff	Tariff in 2007
1201.00	Soybeans	0	0	0
1507	Soybean Oil	6	5	5
1513.21.10 & 1513.29.10	Palm Kernel Oil	1.25	0	0
1511	Palm Oil	2.5	0	0
1513.11 & 1513.19	Coconut Oil	3	0	0
1509 & 1510	Olive Oil	5	4	0
1205.00.10	Rape Seeds	3.5	0	0
1514	Rape (Canola) Oil	6	5	4
1515.21 & 1515.29	Corn Oil	7.5	5	5
1207.60.00	Safflower Seeds	9	0	0
1512.11.20 & 1512.19.20	Safflower Oil	12.5	5	5
1206.00.00	Sunflower Seeds	11	0	0
1512.11.10 & 1512.19.10	Sunflower Oil	15	5	5
Sourc	e: Taiwan Customs Tarif	f Schedule		

GAIN Report #TW3002 Page 11 of 14

**Table 11. Imports of New-to-Market Oils** 

Type of Edible Oil	2000 Imports	2001 Imports	Jan/Sept 2001 Imports	Jan/Sept 2002 Imports	Change (%)	
Palm Kernel Oil	1.1	1.9	1.3	0.9	-31.7	
Palm Oil	70.1	88.9	63.6	60.0	-5.65	
Coconut Oil	6.6	7.4	6.4	5.6	-12.73	
Olive Oil	6.6	7.9	6.5	4.9	-23.43	
Canola Oil	44.9	25.2	21.9	15.8	-27.83	
Corn Oil	3.8	2.5	2.4	0.2	-89.7	
Sunflower Oil	30.9	21.2	18.0	21.7	20.16	
Safflower Oil	0.1	0.5	0.4	0.1	-73.96	
Total Imports	164.0	155.5	120.4	109.2	-9.31	
Source: Taiwan Customs Statistics						

GAIN Report #TW3002 Page 12 of 14

# FEED DEMAND STRATEGIC INDICATOR TABLES FOR [TAIWAN]

## **MEAT PRODUCTION (in 1,000 metric tons)**

		Last Year	Current Year	Out Year Forecast
Calendar Year:	2001	2002	2003	
Poultry				
Poultry Meat:	696	612	580	567
Eggs:	7,800	7,000	6,900	6,800
Pork:	962	909	858	840

# **COMPOUND FEED SECTOR (in 1,000 metric tons)**

		Last Year	Current	Out Year
			Year	Forecast
Calendar Year:	2001	2002	2003	2004
Compound Feed Capacity	26,000	26,000	26,000	26,000
Total Compound Feed Produced	7,730	7,400	7,110	6,760
by integrated producers	2,715	2,590	2,490	2,360
by commercial producers	5,015	4,810	4,620	4,400

## FEED GRAIN USE (in 1,000 metric tons)

		Last Year	Current	Out Year
			Year	Forecast
Marketing Year:	2000	2001	2002	2003
Corn (Domestic consumption: feed)	4,949	4,800	4,650	4500
Other (for wet milling)	250	250	250	250

## **PROTEIN - ENERGY USAGE (in 1,000 metric tons)**

		Last Year	Current	Out Year
			Year	Forecast
Marketing Year:	2000	2001	2002	2003
Total Protein Meal (feed waste domestic	2,304	2,154	2,000	1,920
consumption)				
Soy Bean Meal (feed waste domestic	1,717	1,690	1,580	1,530
consumption)				
Other Protein Meal, e.g. Palm Kernel	216	161	130	110
Meal, Rape Meal (feed waste domestic				

GAIN Report #TW3002 Page 13 of 14

consumption)				
Fish Meal	307	240	230	220
Palm Crude Oil (feed waste domestic	1	1	1	1
consumption)				
Meat and Bone Meal	64	63	60	60

# TRADE (in 1,000 metric tons)

		Last Year	Current	Out Year
Calendar Year:	2001	2002	Year 2003	Forecast 2004
Corn				
Imports:	5,198	5,050	4,900	4,750
Exports:	0	0	0	0
Soy Beans				
Imports:	2,442	2,500	2,200	2,100
Exports:	0	0	0	0
Soy Bean Meal				
Imports:	46	35	26	20
Exports:	0	0	0	0
Fish Meal				
Imports:	292	230	220	210
Exports:	0	0	0	0
Palm Crude Oil				
Imports:	1	1	1	1
Exports:		0	0	0

PROTEIN PRODUCTS TARIFFS AND TAXES		<b>Bound Rate</b>	Applied Rate	Other
	Product	(%)	(%)	Import
Report Year:	Description 1/			Taxes/Fees
0505.90.20.10-5	FEATHER MEAL	2.5	0.0	CHFC/VAT
1501.00.00.00-2	PIG FAT	25.0	20.0	CHFC/VAT
1502.00.22.00-5	FATS OF BOVINE	2.5	0.0	CHFC/VAT
	ANIMALS			
1511	PALM OIL	5.0	2.5	CHFC/VAT
1518.00.90.00-4	ANML/VG FTS	15.0	8.0	CHFC/VAT
	&OILS			
2301.10	MEAT AND BONE	0.0	0.0	CHFC/VAT
	MEAL			

GAIN Report #TW3002 Page 14 of 14

2301.20	FISH MEAL	0.0	0.0	CHFC/VAT
2304	SOYBEAN MEAL	0.0	0.0	CHFC/VAT

Note: CHSC represents the Commercial Harbor Service Charge.